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The on-screen version of the Collider-Accelerator Department Procedure is the Official Version.
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C-A OPERATIONS PROCEDURES MANUAL

1.13 Minors

Text Pages 2 through 4

Hand Processed Changes

<u>HPC No.</u>	<u>Date</u>	<u>Page Nos.</u>	<u>Initials</u>
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Approved: *Signature on File*
 Collider-Accelerator Department Chairman Date

J. Maraviglia

1.13 Minors

1. Purpose

This procedure describes C-A policy so that minors are not exposed to hazardous situations while involved in C-A Department activities without appropriate review and approval.

Definition – A minor or minor student is anyone less than 18 years of age.

2. Responsibilities

- 2.1 The C-A Guest Administrator shall maintain a list of minors engaged in Department activities and their corresponding Supervisor/Sponsor, and shall provide this information to the Office of Educational Programs upon request.
- 2.2 C-A Supervisors/Sponsors shall notify the ES&H Coordinator and Facility Support (FS) Representative when minors are to be engaged in Department activities.
- 2.3 C-A Supervisors/Sponsors shall closely supervise the activities of minors.
- 2.4 The ES&H Coordinator shall maintain a copy of written permission granted to minors to work at C-A. This refers to the documents discussed in Sections 5.1, 5.2 and 5.3 below.

3. Prerequisites

Minors must not be exposed to potentially hazardous conditions without prior review and written approval from the C-A Department Chairman. Examples of hazardous conditions include the following:

- 1. Work in confined spaces;
- 2. Work with Class IIIB or IV lasers;
- 3. Work with materials that are capable of detonation or explosive decomposition at normal temperatures or pressures;
- 4. Work with carcinogens, highly toxic chemicals, or reproductive toxins;
- 5. Work in biohazard etiologic agents listed by CDC in 42CFR Part 72;
- 6. Oxygen Deficiency Hazard Areas, Class I or higher;
- 7. Magnetic Field Hazards;
- 8. Work using cranes or forklifts;
- 9. Work with pressurized systems (non-toxic gases greater than or equal to 100 psi) or related components;
- 10. Electrical hazards (Range B or greater);

11. Work within Radiological or Controlled Areas (this work requires additional approvals as defined in Sections 5.2 and 5.3 below);
12. Work with cryogenics; and
13. Work unsupervised near motorized equipment such as drilling or excavating machinery.

4. **Precautions**

Minors shall be subject to an administrative control level of 25 mrem/yr as outlined in [C-A-OPM 9.5.1](#). In no case shall a minor be allowed to exceed a limiting value of 100 mrem/yr.

5. **Procedures**

5.1 C-A Supervisors/Sponsors shall document planned work involving the minors with submittal to the C-A Department Chair for approval. The ESH Coordinator and FS Representative shall be copied. This document shall include as a minimum:

1. Name, birth date, affiliation, and Life/Guest Number of the Minor;
2. Parent or guardian signature;
3. Start date/end date of planned work;
4. Description of work, including any potential hazards and controls, or statement that there will be no exposure to hazardous situations.
5. Location(s) of work;
6. Name and signature of Supervisor;
7. Assurance of completion of required training before work;
8. Reference associated 1.3.5 &/or 1.3.6 documents if applicable;
9. For work in Radiological and/or Controlled Areas see Sections 5.2 and 5.3 below.

The supervisors/sponsors should meet with the ESH Coordinator, FS Representative and Training Coordinator in advance to ensure all requirements are addressed.

5.2 Minors shall not be allowed to work in Controlled or Radiological Areas without written permission from the C-A Department Chair and other identified approval signatories as defined on the Authorization for Minors to Work in Controlled or Radiological Areas Form <https://sbms.bnl.gov/standard/24/2405e011.doc> (or departmental equivalent). **These minors are subject to an administrative control level of 25 mrem per year.**

- 5.3 Minors shall not be allowed to work in Controlled or Radiological Areas that potentially expose them to greater than 25 mrem per year without the approvals of Section 5.2 above along with approval from the Radiological Control Division Head on the Authorization for Guests, Visitors, or Minors to Exceed 25 mrem Form <https://sbms.bnl.gov/standard/24/2404e011.doc>. **In no case will a minor be allowed to exceed a limiting value of 100 mrem per year.**
- 5.4 If the minor is expected to be exposed to any of the hazards listed in Section 3.0 above, the C-A ES&H Coordinator and Supervisor/Sponsor should consult with the Safety and Health Services Division.
- 5.5 The ES&H Coordinator shall maintain a copy of written permission granted to minors to work at C-A. This refers to the documents discussed in Sections 5.1, 5.2 and 5.3 above. Documenting approval before the minor starting work is mandatory.
- 5.6 The ES&H Coordinator should inform the MCR and any working supervisors in the areas where the minor is assigned.
- 5.7 The minor should be added to 1.3.5/1.3.6 documents as applicable.
- 5.8 The C-A Guest Administrator shall maintain a list of minors engaged in Department activities and their corresponding supervisor/sponsor, and shall provide this information to the Office of Educational Programs upon request.

6. Documentation

- 6.1 List of minors engaged in Department activities; maintained by the Guest Administrator.
- 6.2 Approval documents discussed in Sections 5.1, 5.2 and 5.3 above; maintained by the ESH Coordinator.

7. References

BNL SBMS Interim Procedure 2002-003, Revision 0.

8. Attachments

None